2008 DEFENSE APPROPRIATIONS EARMARK LIST

Appropriations Bill Language

Title VII.

Authorizes the transfer of \$16 million to the Department of Justice for the National Drug Intelligence Center.

Title VIII.

Sec. 8006. Authorizes the Secretaries of the Air Force and the Army to complete phased repair projects, which may include upgrades and additions to Alaskan range infrastructure and training areas, to include improved access to these ranges. This language is accompanied by specific line items in the Senate report tables that earmark over \$112 million for specific repair and upgrade projects in Alaska. This is objectionable because funds for these programs were not requested in the President's Budget Request nor are these programs contained on the Air Force's or Army's Unfunded Priority Lists.

Sec. 8010. Authorizes funds for humanitarian and similar assistance by using Civic Action Teams in the Trust Territories of the Pacific Islands and freely associated states of Micronesia, and authorizes the Secretary of the Army to provide medical services at facilities in Hawaii, and transportation to such facilities, on a nonreimbursable basis, for civilian patients from American Samoa, the Commonwealth of the Northern Mariana Islands, the Marshall Islands, the Federated States of Micronesia, Palau, and Guam. This is objectionable because it's authorizing language on an appropriations bill.

Sec. 8014. Authorizes the Department of Defense (DOD) to enter into certain commercial contracts with private companies that, among other things, are at least under 51 percent ownership of an Indian tribe or Native Hawaiian organization. Additionally, these special contracts can be credited to the DOD's small minority business outsourcing requirements. This is objectionable because it's authorizing language on an appropriations bill.

Sec. 8016. Prohibits the Department of Defense from buying welded shipboard anchor and mooring chain 4 inches in diameter and under unless the anchor and mooring chain are manufactured in the United States. This is objectionable because as a "Buy America" provision it at least impliedly directs spending to, or for the benefit of, an intended recipient and is authorizing language on an appropriations bill.

Sec 8017. Prohibits the Department of Defense from demilitarizing or disposing of M-1 Carbines, M-1 Garand rifles, M-14 rifles, .22 caliber rifles, .30 caliber rifles, or M-1911 pistols in fiscal year 2008. This is objectionable because it's authorizing language on an appropriations bill.

Sec. 8019. Provides \$15 million for payments authorized under the Indian Financing Act for Indian owned Department of Defense contractors that provided supplies or services to the

Department. While this is an authorized program, this funding is objectionable because it was not included in the President's Budget Request.

Sec. 8023. Provides that not less than \$31.91 million be spent on Civil Air Patrol Corporation. This is objectionable because funds for this program were not requested in the President's Budget Request nor are these programs contained on the Air Force's Unfunded Priority List.

Sec. 8025. Prohibits the Department of Defense from buying carbon, alloy or armor steel plate unless the material is melted and rolled in the United States or Canada. This is objectionable because as a "Buy America" provision it at least impliedly directs spending to, or for the benefit of, an intended recipient and is authorizing language on an appropriations bill.

Sec. 8029. Authorizes funds available during fiscal year 2008 and hereafter to be obligated for the Young Marines program. This is objectionable because it's authorizing language on an appropriations bill.

Sec. 8031. Authorizes the Secretary of the Air Force to transfer relocatable military housing units located at Grand Forks Air Force Vase and Minot Air Force Base to Indian tribes located in ND, SD, MT, and MN. This is objectionable because it is authorizing language on an appropriations bill.

Sec. 8036. Provides for not less than \$10 million for the mitigation of environmental impacts, including training and technical assistance to tribes, related administrative support, the gathering of information, documenting of environmental damage, and developing a system for prioritization of mitigation and cost to complete estimates for mitigation, on Indian lands resulting from Department of Defense activities. This is objectionable because funds for this program were not requested in the President's Budget Request and it is authorizing language on an appropriations bill.

Sec. 8047. Prohibits the Department of Defense from buying ball and roller bearings unless the ball and roller bearings are manufactured in the United States. This is objectionable because as a "Buy America" provision it at least impliedly directs spending to, or for the benefit of, an intended recipient and is authorizing language on an appropriations bill.

Sec. 8048. Prohibits the Department of Defense from buying any supercomputers unless the supercomputers are manufactured in the United States. This is objectionable because as a "Buy America" provision it at least impliedly directs spending to, or for the benefit of, an intended recipient and is authorizing language on an appropriations bill.

Sec. 8055. Prohibits the Department of Defense from buying coal as an energy source for heating certain military installations in Germany unless the coal is from the United States. This is objectionable because as a "Buy America" provision it at least impliedly directs spending to, or for the benefit of, an intended recipient and is authorizing language on an appropriations bill.

Sec. 8059. Prohibits the Department of Defense from buying public vessels, certain food and textile materials unless these items are manufactured in the United States. This is objectionable

because as a "Buy America" provision it at least impliedly directs spending to, or for the benefit of, an intended recipient and is authorizing language on an appropriations bill.

Sec. 8061. Prohibits the Department of Defense from developing, leasing or buying the T-AKE class of ships unless the main propulsion diesel engines and propulsors are manufactured in the United States. This is objectionable because as a "Buy America" provision it at least impliedly directs spending to, or for the benefit of, an intended recipient and is authorizing language on an appropriations bill.

Sec. 8075. Authorizes the Secretary of the Air Force to use funds to complete phased electrical infrastructure upgrades at Hickam Air Force Base. This language is accompanied by a specific line item in the Senate report table that earmarks \$8 million for electrical system upgrades at Hickam AFB. This is objectionable because funds for this program were not requested in the President's Budget Request and it is authorizing language on an appropriations bill.

Sec. 8076. Authorizes the Secretary of Defense to distribute surplus dental and medical equipment to Indian Health Service facilities and to federally-qualified health centers. This is objectionable because it is authorizing language on an appropriations bill.

Sec. 8077. Appropriates funds for the Israeli Arrow missile defense program as follows: \$37.4 million for producing Arrow missile components in the United States and in Israel; \$15 million for an Arrow System Improvement Program; and \$42 million for the Short Range Ballistic Missile Defense Program. This is objectionable because funds for these programs were not requested in the President's Budget Request nor are these programs contained on a Service Unfunded Priority List.

Sec. 8078. Restricts the Department of Defense from using funds to give Fleet Forces Command administrative and operational control of U.S. Navy forces assigned to the Pacific fleet. This is objectionable because it is authorizing language on an appropriations bill.

Sec. 8079. Authorizes payment to additional categories of health care professionals based on compensation authorities in Title 38. This is objectionable because it is authorizing language on an appropriations bill.

Sec. 8082. Adds \$5.5 million for assistance, by grants or otherwise, to public schools that have unusually high concentrations of special needs military dependent children, provided that special consideration is given to public schools in States that are considered to be overseas assignments (i.e., Hawaii and Alaska), it also provides that up to 2 percent of the funds shall be used for administrative purposes, including travel, consultants, training and support of the Joint Venture Education Forum (JVEF), a cooperative effort of US PACOM and the Hawaii Department of Education to improve Hawaii's public schools; and that \$2 million shall be used by DoD to establish a trust fund, or fund directly through non-profit organizations, for public-private financing of repairs and maintenance to Hawaii public schools. This funding is objectionable because it was not included in the President's Budget Request.

Sec 8083. Requires that the Army fully finance the Non-Line of Sight Future Force Cannon (NLOS-C) and a compatible large caliber resupply capability; field the system in fiscal year 2010; develop the NLOS-C independent of the broader Future Combat System development time line; deliver eight operation pre-production NLOS-C systems by the end of calendar year 2008; and, requires the Army to provide for no fewer than seven Stryker Brigade Combat Teams. This is objectionable because it is authorizing language on an appropriations bill.

Sec. 8084. Encourages the Department of the Navy to expend up to up to \$3 million for the Pacific Missile Range Facility to contract for the repair, maintenance, and operation of adjacent off-base water, drainage, and flood control systems, electrical upgrade to support additional missions critical to base operations, and support for a range footprint expansion to further guard against encroachment. This funding is objectionable because it was not included in the President's Budget Request.

Sec. 8087. Prohibits the use of funds appropriated or made available to reduce or disestablish the operation of the 53rd Weather Reconnaissance Squadron of the Air Force Reserve. This is objectionable because it is authorizing language on an appropriations bill.

Sec 8093. Directs that the Army retain responsibility for Extended Range Multi-Purpose (ERMP) Unmanned Aerial Vehicle and that the Army may not transfer research and development, acquisition, or program authority relating to current tactical unmanned aerial vehicles (TUAV). This is objectionable because it is authorizing language on an appropriations bill.

Sec. 8094. Authorizes \$10 million for the operations and development of training and technology for the Joint Interagency Training Center-East and the affiliated Center for National Response at the Memorial Tunnel and for providing homeland defense/security and traditional warfighting training to the Department of Defense, other Federal agency, and State and local first responder personnel at the Joint Interagency Training Center-East. These centers are located in West Virginia. This language is accompanied by specific line items in the Senate report tables that earmark \$5.7 million for the Joint Interagency Training Center-East. This is objectionable because funds for this program were not requested in the President's Budget Request and it is authorizing language on an appropriations bill.

Sec. 8095. Extends the authorization of a cooperative research program in ocean sciences between the Defense Advanced Research Projects Agency (DARPA) and the Hawaii High Technology Development Corporation through September 30, 2009. This funding is objectionable because it was not included in the President's Budget Request.

Sec. 8097. Authorizes up to \$15 million for the Asia Pacific Regional Initiative Program for the purpose of enabling the Pacific Command to execute Theater Security Cooperation activities such as humanitarian assistance, and payment of incremental and personnel costs of training and exercising with foreign security forces. This is objectionable because funds for this program were not requested in the President's Budget Request and it is authorizing language on an appropriations bill.

Sec. 8104. Encourages the Secretary of the Navy to transfer up to \$20 million from accounts appropriated for the Department of Defense (DOD) to the Secretary of the Department of the Interior for any expenses associated with the construction of the USS ARIZONA Memorial Museum and Visitors Center in Pearl Harbor, Hawaii. This is the exact amount that remains unfunded towards the total project cost of \$52 million after \$32 million has been raised through private and public donations. The funds would be used by the National Park Service to renovate and upgrade the visitor centers supporting the USS Arizona Memorial. Despite the potential for DOD funds to be spent on a national park, legislative representatives of the Department of the Navy provided Senate Armed Services Committee staff a written position on September 20, 2007 that the Chief of Naval Operations does not object to this provision. Furthermore, this is objectionable because funds for this program were not requested in the President's Budget Request and it is authorizing language on an appropriations bill.

Sec. 8107. Authorizes the expenditure of up to \$4 million for the 8th Air Force Cyberspace Innovation Center for Cyber Combat Development at Barksdale Air Force Base, Louisiana; up to \$2 million for the Minuteman Digitization Demonstration Program; and up to \$5 million may be available to the National Military Family Association for purposes of the program of the Association known as "Operation Purple". This is objectionable because funds for these programs were not requested in the President's Budget Request and it is authorizing language on an appropriations bill.

Report Language Accompanying the Appropriations Bill

Urges the Navy to take the necessary steps to assure continuation of R/V CORY CHOUEST operations (a lease) in the event the alternative ship cannot be turned over for Fleet operations as scheduled (p.47).

Encourages the Air Force to provide the funding required to continue the unit known as the 36th Rescue Flight assigned to Fairchild Air Force Base during fiscal year 2008 (p.56).

Encourages the Department to allocate sufficient funds for naval archeology programs in the Lake Champlain Basin. The Committee also encourages these Lake Champlain activities to expand to complete an underwater survey of the lake, as well as the development of a management protocol for French and British military vessels resting at the bottom of Lake Champlain (p.60).

Encourages the Department of Defense to work in collaboration with the operators of the Job Corps centers that offer military preparation programs to provide curriculum input and modifications. The Department is also encouraged to work with the Office of Job Corps to develop an evaluation tool to measure success in existing military preparation courses (p.60).

Provides \$125 million for advance procurement of an additional AEHF satellite (p.246).

Provides \$50 million for the Ground-based Midcourse Defense System; and, an additional \$50 million in for test and training range support for missile defense testing (p.268).

Provides \$7.5 million for the National Media Exploitation Center (p.285).

Provides \$5.2 million for Commercial Airborne IFSAR Mapping (p.285).

Provides \$200,000 to the Office of the Director of National Intelligence for an intelligence training program run by the Kennedy School of Government (p.285).

TABLE OF EARMARKS FROM REPORT ACCOMPANYING SENATE-PASSED 2008 DEFENSE APPROPRIATIONS BILL

Operation and Maintenance

Sec. 8036 tuck for env. mitigation on Indian lands +10,000

Army Conservation and Ecosystem Management +4,000

Readiness and Env. Protection Initiative +20,000

Environmental Restoration, Army +10,000

Environmental Restoration, FUDS +45,000

Former Soviet Union Threat Reduction +100,000

Regional Centers for Security Studies +20,000

Advanced Combat Helmet PLUS +4,000

Cognitive Air Defense Simulators +2,000

Fleece Insulating Liners for Extended Cold Weather Clothing System-

Generation III [ECWCS–GEN III] +4,000

Sawfly Combat Ballistic Protection Eyewear +2,000

U.S. Army Extended Cold Weather Clothing System [ECWCS] Hand Protection-

System +2,000

PARC/Multi-Brigade Training Requirements +17,500

USARPAC Deployable C4 System. +4,000

USARPAC GCCS & CENTRIX Operations +2,600

USARPAC C4 Modularity +3,000

USARPAC Core Warfighting C4 Network Infrastructure +5,400

Tracking Reusable Assets for Contingency and Emergency Response +4,500

Anniston Army Depot Industrial Efficiencies . +1,500

Biosecurity Research for Soldier Food Safety. +1,500

Army Conservation and Ecosystem Management +4,000

Rock Island Arsenal, Building 299 Roof Replacement Phase II +6,200

Air Battle Captain (ROTC Heli Flight Training Program) +2,000

Leadership for Leaders at CGSC and KSU +500

Northern Nevada Special Operations Training Project +1,950

Online Technology Training Program at Fort Lewis +2,000

Retrograde Tracking, Monitoring and Security of U.S. Military Material +4,000

Army Condition Based Maintenance +2,000

One Soul: Holocaust Education Exhibit +2,000

Naval Oceanographic Office Charting +3,900

Ocean/Surveillance Fleet Consolidation +8,600

Global Force Management Visibility Tool +1,500

Mk 45 Mod 5" Gun Depot Overhauls +12,200

PMRF Flood Control +3,000

Civilian Personnel Compensation +3,000

Professional Development Education +1,000

Naval Sea Cadet Corps +300

Combat Desert Jacket +4,000

Marine Corps Merino Wool Cushion Boot Sock +2,000

Ultra Light Camouflage Net Systems (ULCANS) +2,000

USMC Shelters and Tents CP Large +3,000

Mobile Corrosion Protection and Abatement +2,000

Performance Enhancements for Information Assurance and information Systems-

Operations +1,200

Interoperable Communications/Enterprise Network for USNORTHCOM +4,000

Eielson Utilidors +10,000

Operational Upgrades, BLDG 9480 +10,000

Alaska Land Mobile Radio [ALMR] +4,700

Electrical Distribution Upgrade at Hickam +8,000

Red Flag PARC Upgrades +11,000

National Security Space Institute +3,300

Center for Space and Defense Studies +500

Engineering Training & Knowledge Preservation System +1,000

Naval Postgraduate School PhD in Homeland Defense +4,000

Center for Parts Configuration Management [CPDM] +3,000

Mission Critical Power System Reliability Surveys +1,000

Mobile Shear +500

Military Legal Assistance Clinic +5,000

Civil Air Patrol +2,300

AK CAP Survival Equipment +500

National Guard Youth Challenge Program +15,000

STARBASE Program +5,000

Procurement Technical Assistance Program +7,000

Parents as Teachers Heroes +3,000

Project SOAR (Student Online Achievement Resources Virtual School) +6,000

Military Child Education Coalition +5,000

Defense Critical Languages and Cultures Program +1,000

Regional Centers for Security Studies +20,000

Charles E. Kelly Relocation Project +4,000

Hunter's Point Shipyard Improvements +5,000

Stabilization/Repair of the Ship Repair Facility at MOTBY +8,000

Access to Joint Tanana Training Complex +44,200

Intermodal Marine Facility-Port of Anchorage +11,000

Exhibit on Role of Arab Americans in the Defense of Our Country +2,000

Study on National Security Interagency System +3,000

Aircraft Logging and Recording for Training +2,000

Asia Pacific Regional Initiative +15,000

Readiness and Environmental Protection Initiative +20,000

Armed Forces Health and Food Supply Research +4,000

Authorized Civilian Pay Raise from 3.0 Percent to 3.5 Percent +28,539

Impact Aid +35,000

Impact Aid for Children with Disabilities +5,000

Operation Purple of the National Military Family Association +5,000

2nd Generation Extended Cold Weather Clothing System +2,200

Mobile Corrosion Protection and Abatement +2,000

Army National Guard Battery Modernization Program +3,000

2nd Generation Extended Cold Weather Clothing System +4,000

Advanced Law Enforcement Rapid Response Training +1,000

Integrated Disaster Management System / RDMS +3,000

Joint Interagency Training and Education +5,600

Operator Driving Simulators for the U.S. Army National Guard +3,000

Columbia Regional Geospatial Service Center System +2,000

Mobile Corrosion Protection and Abatement +2,000

Pennsylvania National Guard Integration of the Joint CONUS Communications

Support Environment [JCCSE] +2,500

Vermont National Guard Family Counseling Demonstration +3,000

Virginia National Guard Command and Control Interoperability Upgrades. +1,000

Virginia National Guard Humidity Protection +1,000

Civil Support Team Trainer [CSTT] +5,000

Minnesota National Guard Reintegration Program +4,400

Flying Hours +1,000

166th Network Warfare Squadron +200

Controlled Humidity Protection [CHP] SC Air National Guard +2,700

Crypto-Linguist/Intelligence Officer Initiative +400

Joint Interagency Training and Education +150

Weapons Skills Trainer +4,000

National Guard Global Education Program +750

Procurement

Vibration Management Enhancement Program +3,000

TCAS/TAWS Collision Avoidance +500

IVHMS System—Tennessee National Guard +3,600

Air Warrior +1,000

Ft Knox Godman Airfield ASR +4,000

Rock Island Arsenal—Arsenal Support Program +11,500

Watervliet—Arsenal Support Program +12,000

Rock Island Arsenal Industrial Preparedness +11,500

M18 Smoke Grenades +5,000

Ammunition Peculiar Equipment Outloading Module +1,000

Holston Army Ammunition Plant—Thermobaric Extruder Facility +2,400

Radford Army Ammunition Plant—Solvent Recovery-

System and Environmental Mitigation +10,000

M872A4 34T Flatbed Trailer +3,700

Armored Security Vehicle, Turret Upgrades +3,500

Defense Advanced GPS Receiver +5,000

Radio Personality Modules—test equipment +1,000

Satellite MultiModal Collaborative Crisis & Training Network for

the MN ARNG . +3,000

Trunked Radio System +2,500

Handheld Phraselator System +3,000

MQ-5B Hunter Tactical Unmanned Aircraft System +10,000

Wideband Imagery Dissemination Systems for National Guard +9,600

MX–2A Miniature Remote Thermal Imager . +2,000

Profiler—Meteorological Measuring Set +2,500

Windows Based AFATDS for the TN National Guard +4,200

Automated ID Technology Life Cycle Asset Management for the 160th Special

Operations Aviation Regiment +3,000

Arsenal/Depot AIT at ANAD and RRAD +2,000

Fido Explosive Detector +3,000

Lightweight Maintenance Enclosure +5,000

Lightweight Water Purifier +2,000

All Terrain Lifter Army System II +3,000

1/25th SIB Range Improvement +12,500

Call for Fire Trainer Iteration II/Joint Fires and Effects Trainer +4,000

Combat Arms Training for the ARNG +2,000

Combined Arms Virtual Trainers +6,000

Combined Arms Virtual Trainers for TN National Guard +6,000

FlexTrain eXportable Combat Training Capability +2,500

FlexTrain eXportable Combat Training, Camp Ripley MN. +2,500

IHITS for Blue Force Tracking and Training +5,000

Immersive Group Simulation Training Demonstration +1,000

Laser Collective Combat Training System for the ARNG +5,000

Tabletop Trainers +5,000

Tabletop Trainers for the TN National Guard +5,000

Training Range Enhancements +40,000

Virtual Door Gunner Trainer for the TN National Guard +6,000

Up-Armored HMMWV and Tactical Truck Crew Trainers for TN

National Guard +9,000

Battlefield Anti-Intrusion System +1,500

USMC UC-12 Replacement Aircraft +3,100

CH-46 Communications Enhancements +2,000

P-3 Command, Control, Communications and Computers (C4) for

Anti-Submarine Warfare (ASW) +5,000

P-3 Electronic Support Measures Upgrades +3,000

Direct Squadron Support Readiness Training +4,000

ABL Facility Restoration Program +60,000

Destroyer Modernization Weapons +8,000

AGS Pallets +4,800

CVN Propeller Replacement Program +5,600

Canned Lube Pumps LSD-41/49 Class Amphibious Ships . +2,000

CB90 Riverine Command Boat +6,000

Advanced Boat Lifts for Navy Small Boats Program +2,000

Multi Climate Protection System [MCPS] +2,000

Intelligraf Data Distribution Training +6,000

Training Range Enhancements +40,000

MSAT Simulator for GWOT Training +2,400

Envelop Protective Covers +2,000

NAVRES IT COOP +2,000

Marine Corps Enterprise Information Technology Systems COOP +2,000

Tactical Support Structures for AN/TPS-59 Radar System +6,000

Light Vehicle Intercom System +3,000

Smart-Bomb Rack Unit (S–BRU) Upgrade +5,700

Upgrades for 76-aircraft B–52 fleet +19,000

ARC 210 Improved Communications for F–16 +7,500

AN/APN-241 Radar for ANG C-130 . +4,000

Global Air Traffic Management for KC–135 +9,000

LITENING Targeting Pods for F-16s and A-10s +49,500

ICBM Remote Visual Assessment +13,500

Fixed Base Weather Observation Systems +4,000

Ground Space Electronic Security System, Schriever AFB +2,000

Red Flag PARC Upgrades +26,500

Senior Scout—ROVER III +500

Alaska Land Mobile Radio [ALMR] +2,000

Great Plains Joint Regional Training Center +500

AK NORAD Comm Survivability and Diversity +8,000

Life Support Radio Test Sets +1,500

MK47 Mod 0 Striker 40 +6,000

SOVAS Handheld Imager +6,000

Fusion Goggle System [FGS] +3,900

SU-232 Thermal Sight +3,000

Special Operations Craft—Riverine +4,500

Mission Helmet Recording System +4,000

First Responders Integrated Communications Device—

Louisiana National Guard WMD-CST +1,000

Joint Transportable Decontamination System—Small Scale +8,500

M291/M295 Skin Decontamination +5,000

Chem Bio Protective Shelter +1,000

Automated Composite Technologies and Manufacturing Center +10,000

Domestic Armstrong Titanium Production +5,000

Flexible Aerogels Materials Supplier Initiative +5,000

Read Out Integrated Circuit Manufacturing Improvement +3,000

Photovoltaic Solar Cell Encapsulant +3,000

Reactive Plastic CO2 Absorbent Production Capacity +2,000

POSS Nanotechnology Engineering Scale-Up Initiative +3,000

Lightweight Ammunition and Armor Initiative. +3,500

Microclimate Cooling Systems +2,000

Titanium Metal Matrix Nano Enhanced Titanium +10,000

Research, Development, Test and Evaluation

Env. Qual. Tech/Propelling Agent for Slurry Gel +1,2000

Env. Qual. Tech/Battlefield Asset Recovery Decon +3,000

Env. Qual. Tech/Hawaii Undersea Chem Weaps Assmt +5,500

Env. Qual. Tech/Mods to mVHP +2,500

Env. Qual. Tech/Web-based Env. Comp. Man. Sys. +3,000

Pollution Prevention/O2 Diesel Air Quality +2,000

Pollution Prevention/Asses. Alt Energy AGE +3,000

Strat. Env. Res. Pro./Dendrimer En. Water Remed. +1,000

Smart Data Project: Real Time Geospatial Video Sensor Intelligence +1,000

Materials Integrity Management Research AF Sytems +1,000

DDG-51 Class Modernization Hybrid Propulsion-

Permanent Magnet Drive System +2,000

Advanced Precision Kill Weapons System +6,000

Advanced Automotive Technology +6,000

High Altitude Airship Program +1,000

Mid-infrared Advanced Chemical Laser +3,750

Sea Light Beam Director +3,750

Low Cost, High Resolution, Side Scan Sonar for USV and

Harbor Surveillance +1,000

Laser Perimeter Awareness System for integration into the

Electronic Harbor Security System +5,000

High Temperature Superconductor AC Synchronous Propulsion Motor +5,000

Ground Warfare Acoustical Combat System of netted sensors +1,200

Mark V replacement research/all-composite hulls for ships +4,000

Aegis Ballistic Missile Defense System +75,000

Virtual Systems Integrated Laboratory-Armored Vehicle Components and

Systems Simulated in Cost-Effective Virtual Design and Test Environment +4,000

Silicon Carbide Armor Manufacturing Initiative +3,000

Activated Nanostructures for De-icing +1,500

Document Exploitation for Handwriting +1,000

Flexible Electronics Research Initiative +1,000

Global Military Operating Environments +2,000

Integrated nanosensors for NBC threat detection +2,000

Organic Semiconductor +1,000

Semiconductor-based Nanotechnology Applications +1,000

Burn and Shock Trauma Institute +2,000

Hi-Tech Eyes for the battlefield +1,000

Low Temperature Vehicle Performance Research +1,000

Nanomedical Technologies Research +2,000

University Research Initiatives +10,000

Center for Information Assurance +1,000

Detecting and Eradicating Corrosion in Army vehicles +1,500

Electron Microprobe Research +1,500

Infotonics Research . +3,000

Integrated Systems in Sensing, Imaging and Communications +1,000

MEMS Antenna for wireless comms/UAVs +3,000

Modeling and Analysis of the Response of Structures +1,000

Nanoscale Biosensor Research +2,500

Nanotubes optimized for lightweight exceptional strength +2,000

National Network Security test bed +2,000

Transparent nanocomposite armor +300

University-based Automotive Research +2,000

Visualization for Training and Simulation in urban terrains +1,400

3D Woven Ballistic Materials for Future Combat Systems +2,000

Advanced Ceramic Surface Engineering for helicopter compressor blades +3,000

Complex-shaped armor for soldier torso and extremity protection +2,000

Control system for laser powder deposition +400

Future Affordable Multi-utility Materials for Army Future Combat Systems +8,000

Improvised Explosive Device simulation in different soils +400

Multi-scale modeling of impact resistant materials for body armor +1,500

Nanomanufacturing of multifunctional sensors +2,000

Nanotechnologies Initiative +5,000

Next Generation lightweight electric drive systems for Army weapons +2,000

Protection against Improvised Explosive Devices +4,000

Titanium Fabrication for Military/Industrial equipment +1,350

Ultra lightweight metallic +2,000

Center for Advanced Microelectronics Manufacturing (CAMM) +2,000

Integrated Multi-Target Remote-Sensing Technology and Its Applications +2,000

Nanophotonic devices +2,000

S31 Technology +1,000

Composite small main rotor blades +2,000

Dominant Military Operations on Urbanized Terrain Viewer +3,000

Knowledge Integration and Management +3,000

Silver Fox and Manta Unmanned Aerial Systems +4,000

Mariah Hypersonic Wind Tunnel development program +5,000

Novel Lightweight Armor Material for Insensitive Munitions

Protection of Tactical Missiles +1,000

Army Missile and Space Technology Initiative +5,000

Missile Aero-propulsion Computer System (MACS) Modernization +6,000

Unmanned Systems Technology Development +2,000

Boston University Photonic Center +4,000

Advanced Manufacture of Lightweight Materials and Components +2,000

Automotive Research Equipment Purchase +2,000

Center for Advanced Vehicle Design and Simulation +1,000

Hydrogen PEM Fuel Cell Medium/Heavy-duty Vehicle Demonstration Program +3,000

Military Fuels Research Program +2,000

Nano-Engineered Multi-Functional Transparent Armor +1,000

SkyPure—Water from Air +2,000

Flexible Solar Cell for Man-Portable Power Generator +2,300

Laser-based Explosives and Chem/bio Standoff and Point Detector +4,000

Small UAVs and Sensors +500

Enhanced Vapor Aeration Capabilities +3,000

Army Center of Excellence in Acoustics +4,100

Center for Borane Technology +2,000

Development and Demonstration of Multi-use/Urban Operations-

Joint Training System at Fort Dix +3,000

Electroconversion of Energetic Materials +6,000

Electrolytic Super-Capacitor +3,000

Engineered Surfaces for Weapons Life Extension +3,000

Exploding Foils Initiators with Nanomaterial-based Circuits +3,000

Fatigue Odometer for Vehicle Components and

Gun Barrels Project Cannon Systems +3,300

Green Armament and RangeSafe Technology +3,000

Lightweight Munitions and Surveillance for Unmanned Air and Ground Vehicles +5,000

Research for Army Cannon Systems . +2,300

Ripsaw Unmanned Ground Vehicle Weaponization +2,000

Advanced Integrated Portable Power Generation and Charging System +3,000

Cogeneration for Enhanced Cooling and Heating of Advanced Tactical Vehicles +3,000

Enzyme Biofuel Cell (SEBC) +1,000

High-Frequency, High-Power Electronic and Optoelectronic Devices on

Aluminum Nitride (AlN) +3,000

Improved Energy Density Battery +1,000

Large Format Li-Ion Battery +1,000

Mega-Capacity Hybrid Chemistry Lithium Primary Portable Batteries +2,000

ONAMI Miniature Tactical Energy Systems Development +2,500

PEM Fuel Cell Tactical Generators +5,000

Portable Hydrogen Generator and Hybrid Power Source +2,000

Renewable Energy for Military Applications +1,500

Self-powered, lightweight, flexible display unit on a plastic substrate +2,000

Soldier Portable Solid Fuel Hydrogen Generator Cartridge +5,000

Thin Lithium-Iron Disulfide Primary Batteries +3,000

Small Business Infrared Materials Manufacturing—Silicon Alternatives +2,000

Standoff Improvised Explosive Device Protection Program +4,000

Propelling Agent for Slurry Gel +1,200

Portable Flexible Communication Display Devices +1,500

Airborne Threats +1,600

Biologically Inspired Security Infrastructure for Tactical Environments +2,000

Geosciences/Atmospheric Research +2,000

Biosecurity Research for Soldier Food Safety +2,500

Carbon Nanotube Armor Protection System +2,000

Modular Ballistic System for Force Protection +5,000

Protective Textile Fabric +1,000

Advanced Bio-engineering for Enhancement of Soldier Survivability +1,500

BioFoam Protein Hydrogel for Battlefield Trauma +2,000

Biomechanics Research +2,000

Carbon Nanotube Production +1,000

Complementary and Alternative Medicine Research (MIL-CAM) +5,000

Fibrin Adhesive Stat (FAST) Dressing +2,000

MRI-DTI Technology to Improve Diagnosis and Treatment of TBI +2,500

New Vaccines to Fight Respiratory Infection +4,000

Orthopedic Extremity Trauma Research Program +6,000

Respiratory Biodefense Initiative +2,000

Staph Vaccine +2,000

Alternative Energy Research +20,000

BioSensor Communicator and Controller System +3,000

ChemBio Integrated Material for Tent Structures +2,000

Deployment of Affordable Guided Airdrop System . +2,000

High-Pressure/Microwave MRE Processing +2,000

Joint Precision Airdrop System (JPADS) Program for Payloads up to 30K lbs +4,000

Advanced Lower Limb Prosthesis for Battlefield Amputees +3,000

Advanced Medical Training Platform: Madigan Army Medical Center +500

Advanced Regenerative Medicine (ARM) Skin Cell Therapies-

Burn, Limb and Digit Treatment +1,500

Advanced Surface Technologies for Prosthetic Development +2,000

Battlefield Tracheal Intubation for Wounded Soldiers +2,000

BEAR (Battlefield Extraction-Assist Robot) +2,000

Brain, Biology, and Machine Applied Research +2,000

Burns Outcomes Infrastructure Project—only for dual military/civilian

application +3,000

Center for Integration of Medicine and Innovative Technology (CIMIT) +5,000

Control of Inflammation and Tissue Repair (CITR) +2,000

Gulf War Illness Peer Reviewed Research +15,000

Hibernation Genomics +2,000

Institute for Regenerative Medicine +3,000

Integrated Patient Quality Program +2,000

Limb Tissue Regeneration after Battlefield Injuries using Bone-

Marrow Stem Cells +4,000

Medical Modeling and Simulation Through Synthetic Digital Genes +2,000

National Biodefense Training +1,750

National Functional Genomics Study +3,000

Neuroimaging, Neurotrauma and Neuroscience in U.S. Warfighters +3,000

Post-IED Craniofacial Injury Reconstruction +2,000

Robotic Telesurgery in Combat Environments +3,500

Rugged Electronic Textile Vital Signs Monitoring +2,000

Surgical Wound Disinfection and Biological Agents +2,000

Trauma Care, Research and Training +2,000

U.S. Approved Drugs for Malaria and Leishmaniasis in-

U.S. Military and Civilian Personnel +3,400

Walter Reed Preventive Medicine Pilot Program +6,000

Wireless Electronic Patient Records, WPIC—Personal Information Carrier +2,000

Alternate Payload Bomb Live Unit Munition +2,800

Enhanced Rapid Tactical Integration and Fielding of Systems +2,000

Excalibur +3,000

Fuel Cells for Mobile Robotic Systems Project +3,000

Full Authority Digital Engine Controls (FADEC) +3,000

Helmet Mounted Display/Visor Projection for Army Helicopters +2,000

Improved VAROC/UAV compression system development +3,000

Joint Technical Data Integration—Wide Intelligraf Content Enhancements +4,000

Parts-on-Demand for CONUS Operations +4,500

Quick-MEDS Automated Release Pod +2,000

Technologies for Military Equipment Replenishment +4,000

Unmanned Aerial Vehicle Resupply (BURRO) +2,000

Vectored Thrust Ducted Propeller (VTDP) Compound Helicopter-

Advanced Technology Demonstration +4,000

Development of Truck-deployed Explosive Containment Vessel +1,800

Integrated Aircraft Test Bed +2,000

Knowledge Driven Manufacturing System (KDMS) +1,000

Lightweight Cannon Recoil Reduction +1,000

Raman Chemical Identification System +2,000

Active Protection Systems Initiative for the Joint Light Tactical Vehicle +3,800

Advanced Battery Technology (3D ABT) +2,000

Advanced Digital Hydraulic Hybrid Drive System +1,000

Advanced Lightweight Composite Armor +2,000

Advanced Thermal and Oil Management Controls +2,000

Antiballistic Windshield Armor +4,000

Armor Ready Composite Cab Transition +3,000

Army Fuel Cell Non-Tactical Vehicle Propulsion +2,000

Center for Military Vehicle Technologies +5,100

Crosshairs Hostile Fire Indicating System +3,000

Diminishing Manufacturing Sources and Material Shortages

(DMSMS) Case Resolution Program +2,000

Enhanced Directed Armor RPG Vehicle Protection System +1,000

Field Deployable Fleet Hydrogen Fueling +3,000

Fuel Cell Cost Reduction and Durability Improvements +2,000

Ground Forces Readiness Enabler for Advanced Tactical Vehicles (GREAT-V) +2,000

Ground Vehicle Fastening and Joining Research +1,000

High Speed Diesel Combustion +4,000

Hybrid Engine Development Program for the Tactical Wheeled Vehicle Fleet +8,000

Lightweight Structural Composite Armor for

Blast and Ballistic Protection +2,000

Next Generation Manufacturing Technologies for Defense Supply Chain +4,000

Next Generation Non-Tactical Vehicle Propulsion +2,000

Novel Onboard Hydrogen Storage System Development +3,000

Rotary Multi-Fuel Auxiliary Power Unit for M1A1 Abrams Tank +2,000

Tactical Wheeled Vehicle Structures for Improved Survivability and Performance +5,000

Unmanned Ground Vehicle Initiative (UGVI) +12,000

Vehicle Design Optimization Tools +1,000

Vehicle Information Manager Display for Drivers (VMID) +1,000

Vehicle Maintenance and Prognostics System +3,200

Experiential Technologies for Urban Warfare and Disaster Response +1,000

Joint Fires and Effects Training System (JFETS) +2,000

Cryofracture/Plasma Arc Demilitarization Program +3,000

Missile Recycling Capability—Letterkenney Munitions Center +6,500

DAIRCM/CMWS for Army helicopters +6,000

Army Virtual Emergency Research Testbed (AVERT) +3,000

Perimeter & Maritime Sensor Network +3,000

Software Engineering Enhancements +3,000

Advanced Demining Technology +4,000

Enhanced Digital Electronic Night Vision (EDEN) +4,000

FCS Short Range Electro Optic (SREO) Sensor for Stryker +4,000

UCXR System +4,000

Advanced Tactical Fuels for the Military +2,000

Development and Research of Zero Energy Homes at Ft. Campbell +1,200

Direct Methanol Fuel Cell Development +2,000

Regenerative Fuel Cell System for Silent Camp Operations +3,000

Enhanced Multi-Mission Radar +3,000

HYPERSAR Radar +4,000

Shared Vision +4,000

X-Band interferometric Radar (XBIR) +2,000

Adaptive Lightweight Materials for Missile Defense +2,000

Advanced Cavitation Power Technology +5,900

Advanced Electronics Rosebud Integration +4,000

Advanced Environmental Control System +4,000

Advanced Fuel Cell Research +2,000

Advanced Hypersonic Weapon Technology Demonstration +41,700

Advanced Strap-down Seeker +2,500

AHW BMC2 HWIL Technology Demonstration +3,000

Alternative Power Technology (APT) for Missile Defense +4,000

Compact Pulsed Power for Defense Applications +2,000

Future TOC Hardware/Software Integration +2,000

Heat Dissipation for Electronic Systems & Enclosures +3,000

Model-Based Enterprise +1,000

Neutralization of IEDs +3,000

Low-Earth Orbit Nanosatellite Integrated Defense Autonomous Systems +5,000

Radiation Hardening Technology +2,000

Standoff Hazardous Agent Detection & Evaluations System (SHADES) +2,000

Transfer Missile Power System (OBVP) +3,000

Vertical Integration for Missile Defense Surveillance Data +5,900

Applied Counterspace Technology (ACT) Testbed +6,400

HiSentinel +5,800

Integrated Nanosat Delivery System +3,000

Low Cost Interceptor (LCI) +5,000

Tactical Overwatch High Altitude System (TOHAS) +2,000

Advanced Extended Range Attack Missile +1,000

Border Security and Defense Systems Research +3,000

High Explosive Air Burst (HEAB) 25mm Ammunition +4,000

Responsive Textiles +1,000

Battlefield Asset Recovery Decontamination System (BARDS) +3,000

Hawaii Undersea Chemical Weapons Assessment Program +5,500

Modifications to mVHP for use against TICs/TIMs +2,500

Web-Based Environmental Compliance Management System +3,000

Future Medical Shelter System—44/48 Bed Combat Support Hospital +7,500

Wireless Medical Monitoring System (WiMed) +3,000

Bi-Directional English-Iraqi Instant Language Translation System +2,300

Enhanced Self-Sintered Silicon Carbide Body Armor +2,000

XM312 +10,000

Fuel Saving Continuously Variable Transmission for FMTV and JLTV +2,500

Heavy Expanded Mobile Tactical Truck A3 +10,000

Second Source Tires for JLTV +1,500

Enforc-IT Anti Tamper System +1,600

Lightweight Multi-purpose Laser +3,000

Mortar Anti-Personnel Anti-Material Technology +2,000

Plasma Sterilizer +3,000

Military Applications of Medical Grade Chitosan +3,500

C3T CDSOS (Cross Domain Strategic and Operational Solution) +2,100

Electronic Commodity Program +1,000

Mobile Objects for Net-Centric Operations +3,000

Next Generation Ice Protection Technologies +2,000

Arroyo Center program adjustment +4,000

2D-3D Face Recognition System +3,000

Arabic Language Training Program +1,000

Automated Communication Support System +2,000

Multispectral Fingerprint Device +2,000

Dugway Testing and Infrastructure Upgrade +3,500

Joint Directed Energy Test Site—IED Defeat +6,000

Joint Tactical Network Test Environment +2,500

Robotic Manipulators for Explosive Ordnance Disposal +600

Rotorcraft Survivability Assessment Facility +2,000

Denied GPS +3,000

Knowledge, Tech Sharing Program +3,000

Advanced Cluster Energetics +5,000

Depleted Uranium Sensing and Treatment for Removal +4,900

Gun Propellant Demilitarization +3,000

Medium Caliber Metal Parts Upgrade +3,000

Thermal Battery qualification +2,900

Combat Vehicle Transmission Improvement +4,800

Vehicle Health Management Systems Development +4,000

Aircraft Component Remediation +3,000

CH–47 Integrated Vehicle Health Management System (IVHMS) +10,000

Helicopter Autonomous Landing System +5,000

Advanced Architecture Designs Supporting U.S. Army Net Centric Warfare +2,000

Heuristic Internet Protocol Engine +2,000

Asymmetric Threat Response and Analysis Project (ATRAP) +2,000

Effect Based Approach to Operations +1,000

Aging Weapons Systems Structural Repair +2,000

Electrodeposited Coatings Systems +2,000

High Temperature Ceramic Manufacturing Technology +2,000

Improved Manufacturing Process for SAPI +4,000

Laser Engineered Net Shaping (LENS) Qualification for

Aging Weapons Systems +2,000

Legacy Aerospace Gear Drive Re-Engineering Initiative +1,000

Next Generation Combat Helmet +3,000

Three Dimensional Printing of DOD Titanium Weapon System Components . +2,000

Cell-Based Sensors for Chemical Threats +1,500

Low Acoustic and Thermal Signature Battlefield Power Source +2,500

University Research Initiatives +10,000

Alternative Futures at the Range Complex level for the Southwest U.S. +1,000

Evaluating ELF Signals in Maritime Environment +1,700

Navy Science and Technology Outreach +1,000

ONAMI Nanoelectronics and Nanometrology Initiative +2,500

Texas Microfactory +3,500

Rotational Molded Double Wall for Un-manned Patrol Boat +3,000

Advanced Propulsion for Gun Launched Projectiles and Missiles +1,000

Clustered Millimeter Wave Imaging Sensors & Manufacturing +2,000

Combustion Light Gas Gun Projectile +4,000

High Energy Conventional Energetics +5,000

High Performance Alloy Materials, Steel Castings +2,000

Unmanned Aerial Vehicle Fuel Cell Power Source +2,000

Advanced Simulation Tools for Aircraft Structures +2,000

Alternative Energy Research +20,000

Critical Composite Technologies for SOF Medium Range Craft +1,000

Force Protection Applied Research +2,500

Lithium-Ion Cell Development +3,000

Magnetic Refrigeration Technology +4,000

PMRF Force Protection Lab +2,500

Shipboard Production of Synthetic Logistics and Aviation Fuel +2,000

Undersea Perimeter Security Integrated Defense Environment +3,500

Survivability Program +1,500

Warfighter Rapid Awareness Processing Technology for Distributed Operations +3,000

Infrared Materials Center +2,000

All Weather Sense and Avoid for UAVs +3,000

Theater Undersea Warfare Initiative (TUSW) +4,000

Advanced Fouling and Corrosion Control Coatings +2,000

Amelioration of Military Hearing Loss +1,000

Biosensors for Defense Applications +2,500

Digital Directed Manufacturing Project +1,600

Miniaturization, Systemization of Semiconducting Metal Oxide +1,000

Nanotechnology Research +5,000

Gallium Nitride RF Power Technology +2,500

National Initiatives for Applications of Multifunctional Materials +2,000

Silicon Carbide MOSFETs for Electric Power Systems +1,500

Galfenol Energy Harvesting +2,000

High Power Lithium Battery +1,000

Electromagnetic Signature Assessment System Using Multiple-

Autonomous Underwater Vehicles +2,500

NMSU Water Security Program +1,000

Virtual Onboard Analyst (VIRONA) for Multi-Sensor Mine Detection +1,000

Advanced Motor-Propulsor Development and Testing +5,000

Autonomous Unmanned Surface Vessel (AUSV) +1,000

Excalibur +1,000

Expeditionary Craft +20,000

Free Electron Laser Naval Applications +2,000

Information Sharing for ISRTE +1,000

Long Wavelength Array +3,000

Smart Instrument Development for Magdalena Ridge Observatory +6,500

Accelerating Fuel Cells Manufacturability +3,000

Advanced Volume Sensor System +2,000

Electrochemical Field-Deployable System for Potable Water Generation +3,000

Formable Textile for Complex Shaped Aerospace Composites +2,000

Future Fuel Non-Tactical Vehicle Initiative +2,000

Manufacturing and Repair Cell +4,000

Maritime Mobile Force Protection Program +2,000

Secure Infrastructure Technology Laboratory +4,000

Single Generator Operations Lithium Ion Battery +5,000

Wide-Band Gap Semiconductor Materials +2,000

Defense Modernization and Sustainment Initiative +2,000

Protective Apparel Technology Systems +1,000

Pacific Airborne Surveillance and Testing +16,000

MEMS Microdetonator Packaging Technology +3,000

Integrated Warfighter Biodefense Program +3,000

Massive Tissue Injury/Amputation Repair with Composite-

Tissue Transplantation +3,000

Neural Control of External Devices (artificial limb movement) +1,000

Deep Water Acoustic Detection System +3,200

Semi-Submersible UUV +1,000

Intelligence Gathering Uninhabited System +2,000

Unmanned Aircraft Systems Optimization Technologies +3,500

Sensor Arrays for Multiple Applications +1,500

Advanced Fluid Controls for Shipboard Applications +3,000

Advanced Steam Turbine +5,000

DDG-51 Homopolar Hybrid Drive +6,100

MTTC/IPI and National Surface Treatment Center +4,000

Power C